## **CLAIMS**

- 1. A prophylactic/therapeutic agent for cancer, comprising a compound or its salt that inhibits the activity of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
- 2. A prophylactic/therapeutic agent for cancer, comprising a compound or its salt that inhibits the expression of a gene for a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
- 3. An antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a polynucleotide encoding a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.
- 4. A prophylactic/therapeutic agent for cancer, comprising the antisense polynucleotide according to claim 3.
- 5. A prophylactic/therapeutic agent for cancer, comprising an antibody against a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
- 6. The prophylactic/therapeutic agent for cancer according to claim 1, 2, 4 or 5, wherein said cancer is colon cancer, breast cancer, lung cancer, pancreatic cancer or ovary cancer.
- 7. A diagnostic agent for cancer comprising an antibody against a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
- 8. A diagnostic agent for cancer comprising a polynucleotide encoding a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.
- 9. The diagnostic agent according to claim 7 or 8, wherein said cancer is colon cancer, breast cancer, lung cancer, pancreatic cancer or ovary cancer.
- 10. A prophylactic/therapeutic agent for a compound or its salt having an action of inhibiting enzyme activity to transfer the methyl group(s) to the lysine 9 and/or 27 residue of histone H3.
- 11. An apoptosis inducing agent comprising a compound or its salt having an action of inhibiting enzyme activity to transfer the methyl group(s) to the lysine 9

and/or 27 residue of histone H3.

- 12. A prophylactic/therapeutic agent for cancer comprising a compound or its salt having an action of inhibiting expression of enzyme to transfer the methyl group(s) to the lysine 9 and/or 27 residue of histone H3.
- 13. An apoptosis inducing agent comprising a compound or its salt having an action of inhibiting expression of enzyme to transfer the methyl group(s) to the lysine 9 and/or 27 residue of histone H3.
- 14. A method of screening a prophylactic/therapeutic agent for cancer, which comprises using a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
- 15. A kit for screening a prophylactic/therapeutic agent for cancer, comprising a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
- 16. A method of screening a prophylactic/therapeutic agent for cancer, which comprises using a polynucleotide encoding a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.
- 17. A kit for screening a prophylactic/therapeutic agent for cancer, comprising a polynucleotide encoding a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.
- 18. An apoptosis inducing agent comprising a compound or its salt that inhibits the activity of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
- 19. An apoptosis inducing agent comprising a compound or its salt that inhibits the expression of a gene for a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
- 20. A method of screening an apoptosis inducing agent, which comprises using a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof.
- 21. A method of screening an apoptosis inducing agent, which comprises using DNA encoding a protein having the same or substantially the same amino acid sequence

75

as the amino acid sequence represented by SEQ ID NO: 1, or its partial peptide.

- 22. A method of preventing/treating cancer, which comprises administering to a mammal an effective dose of (i) a compound or its salt that inhibits the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, (ii) a compound or its salt that inhibits the expression of a gene for said protein, its partial peptide or a salt thereof, (iii) an antibody against said protein, its partial peptide or a salt thereof, or (iv) an antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a polynucleotide encoding said protein or its partial peptide.
- 23. A method of inducing apoptosis, which comprises administering to a mammal an effective dose of (i) a compound or its salt that inhibits the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, (ii) a compound or its salt that inhibits the expression of a gene for said protein, its partial peptide or a salt thereof, (iii) an antibody against said protein, its partial peptide or a salt thereof, or (iv) an antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a polynucleotide encoding said protein or its partial peptide.
- 24. A method of preventing/treating cancer, which comprises inhibiting the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, or inhibiting the expression of a gene for said protein, its partial peptide, or a salt thereof.
- 25. A method of inducing apoptosis, which comprises inhibiting the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, or inhibiting the expression of a gene for said protein, its partial peptide, or a salt thereof.
- 26. Use of (i) a compound or its salt that inhibits the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, (ii) a compound or its salt that inhibits the expression of a gene for said protein, its partial peptide or a salt thereof, (iii) an antibody against said protein, its partial peptide or a salt thereof, or (iv) an antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a

polynucleotide encoding said protein or its partial peptide, to manufacture a prophylactic/therapeutic agent for cancer.

27. Use of (i) a compound or its salt that inhibits the activity of a protein having the same or substantially the same amino acid sequence as the amino acid sequence represented by SEQ ID NO: 1, its partial peptide, or a salt thereof, (ii) a compound or its salt that inhibits the expression of a gene for said protein, its partial peptide or a salt thereof, (iii) an antibody against said protein, its partial peptide or a salt thereof, or (iv) an antisense polynucleotide comprising the entire or part of a base sequence complementary or substantially complementary to a base sequence of a polynucleotide encoding said protein or its partial peptide, to manufacture an apoptosis inducing agent.